

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for performing bus arbitration, the method comprising:
receiving, by a device driver layer from at least one application included in an application layer, a request to perform a device access operation on an end device on a bus, the device driver layer including at least one device driver that communicates with the end device utilizing the bus;
determining, by the device driver layer, whether the end device is locked; ~~[[and]]~~
responsive to the end device not being locked, locking, by the device driver layer, the end device and performing the device access operation; and operation-
responsive to the device access operation completing, unlocking the end device.
2. (Original) The method of claim 1, wherein the device access operation is one of a read operation and a write operation.
3. (Original) The method of claim 1, further comprising:
responsive to the end device being locked, denying the device access operation.
4. (Original) The method of claim 1, wherein the step of determining whether the end device is locked includes determining whether an address of the end device is found in a list of occupied end devices.
5. (Original) The method of claim 1, wherein the step of locking the end device includes placing a device address of the end device in a list of occupied end devices.
6. (Canceled)
7. (Currently Amended) The method of claim ~~[[6,]]~~ 1 wherein the step of unlocking the end device includes removing the device address from the list of occupied end devices.
- 8.-14. (Canceled)

15. (Currently Amended) An apparatus for performing bus arbitration, the apparatus comprising:
a bus;
at least one end device connected to the bus;
at least one application included in an application layer; and
a driver layer that includes a wrapper layer, the driver layer including at least one device driver that communicates with the at least one end device utilizing the bus,
wherein the wrapper layer receives a request from the at least one application to perform a device access operation on the at least one end device from within the at least one end device on the bus, determines whether the at least one end device is locked, and, responsive to the at least one end device not being locked, locks the at least one end device and performs the device access operation, and wherein, responsive to the device access operation completing, the wrapper layer unlocks the end device.
16. (Currently Amended) A computer program product, in a computer readable medium, for performing bus arbitration, the computer program product comprising:
instructions for receiving, by a device driver layer from at least one application included in an application layer, a request to perform a device access operation on an end device on a bus, the device driver layer including at least one device driver that communicates with the end device utilizing the bus;
instructions for determining, by the device driver layer, whether the end device is locked; [[and]]
instructions, responsive to the end device not being locked, for locking, by the device driver layer, the end device and performing the device access ~~operation.~~ operation; and
instructions, responsive to the device access operation completing, for unlocking the end device.
17. (Original) The computer program product of claim 16, wherein the instructions for determining whether the end device is locked include instructions for determining whether an address of the end device is found in a list of occupied end devices.
18. (Original) The computer program product of claim 16, wherein the instructions for locking the end device include instructions for placing a device address of the end device in a list of occupied end devices.
19. (Canceled)

20. (Currently Amended) The computer program product of claim ~~[[19,]]~~ 16 wherein the instructions for unlocking the end device include instructions for removing the device address from the list of occupied end devices.
21. (New) The apparatus of claim 15, wherein the device access operation is one of a read operation and a write operation.
22. (New) The apparatus of claim 15 wherein the wrapper layer, responsive to the end device being locked, denies the device access operation.
23. (New) The apparatus of claim 15, wherein the wrapper layer determines whether the end device is locked by determining whether an address of the end device is found in a list of occupied end devices.
24. (New) The apparatus of claim 15, wherein the wrapper layer locks the end device by placing a device address of the end device in a list of occupied end devices.
25. (New) The apparatus of claim 15 wherein the wrapper layer unlocks the end device by removing the device address from the list of occupied end devices.
26. (New) The computer program product of claim 16, wherein the device access operation is one of a read operation and a write operation.
27. (New) The computer program product of claim 16 further comprising:
instructions for, responsive to the end device being locked, denying the device access operation.